### SWX-11417410-06-3B

### Waveguide Crossguide Coupler, D Band, 10 dB

**SWX-11417410-06-3B** is a three-port, split block crossguide coupler that is offered for power sampling where directivity is of no concern. Compared to a multi-hole directional coupler, crossguide couplers offer lower insertion loss and a smaller form factor and insertion length. This model operates between 110 to 170 GHz with a 10 dB typical coupling level and 1.4 dB nominal insertion. The input, output, and coupled ports are all WR-06 waveguides with UG-387/U-M anti-cocking flanges.

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency	110 GHz		170 GHz
Insertion Loss*		1.4 dB	
Coupling		10 dB	
Directivity A KIN G		10 dB	
Return Loss		18 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

\*Performance may be reduced at band edges.

### **Mechanical Specifications:**

Item	Specification		
Waveguide Ports	WR-06 Waveguide with UG-387/U-M Anti-Cocking Flange		
Material	Aluminum		
Finish	Gold Plated		
Weight	0.9 Oz		
Outline	WX-BD-3-F4-A		

ECCN	
EAR99	

### **FEATURES**

- Full Band Operation
- Low Insertion Loss
- Moderate Directivity
- Three Port Configuration

### **APPLICATIONS**

- Test Labs
- Instrumentations
- Sub-assemblies

### SUPPLEMENTAL DETAILS



Advanced Rev 1.2

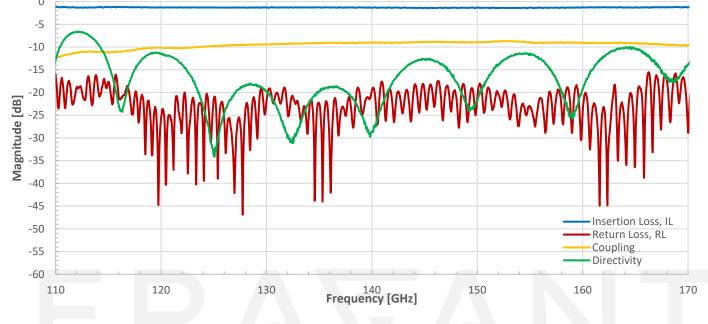
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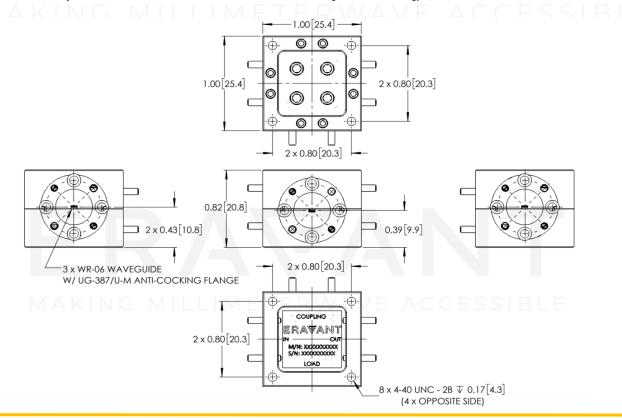
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**Typical Performance Vs. Frequency** 



### Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters])



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### NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

### CAUTION:

• If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.

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